

CLAIM AMENDMENTS**Claim 1 (previously amended):**

A miter saw comprising:

a base assembly defining a cutting zone;

a motor assembly associated with the base assembly and including an arbor rotatable about an elongate central axis;

a blade mounted on the arbor and configured to selectively cut workpieces in the cutting zone; and

a safety system including one or more support arms and a braking mechanism having at least one brake member adapted to engage the blade, where the brake member is coupled to the one or more support arms, and where the one or more support arms are configured to move the brake member in a substantially arcuate path about the elongate central axis of the arbor.

Claim 2 (withdrawn):

The miter saw of claim 1, further comprising a fastener configured to fasten the blade to the arbor, and where at least one of the one or more support arms includes an opening configured to facilitate installation of the fastener.

Claim 3 (original):

The miter saw of claim 1, further comprising a pivot arm assembly configured to couple the motor assembly to the base assembly, where the pivot arm assembly may be pivoted toward and away from the cutting zone, and where the one or more support arms are configured to move the brake member about the elongate central axis of the arbor as the pivot arm assembly is pivoted toward and away from the cutting zone.

Claim 4 (original):

The miter saw of claim 3, where the one or more support arms are configured to move the brake member in a direction generally opposite to the direction in which the pivot arm assembly is pivoted.

Claim 5 (original):

The miter saw of claim 3, further comprising one or more linkage assemblies configured to couple the one or more support arms to a portion of the base assembly.

Claim 6 (original):

The miter saw of claim 5, where the blade has angular momentum when rotating, and where the brake member is configured to transfer at least a portion of the angular momentum of the blade to the one or more support arms.

Claim 7 (original):

The miter saw of claim 6, where the one or more linkage assemblies are configured to transfer at least a portion of the angular momentum of the blade from the one or more support arms to the base assembly.

Claim 8 (withdrawn):

The miter saw of claim 1, where the safety system includes a detection system configured to detect accidental contact between a person and the blade, and where the brake member is configured to engage and stop the rotation of the blade if the detection system detects such contact.

Claim 9 (withdrawn):

The miter saw of claim 1, further comprising a housing configured to cover at least a portion of the blade, and where the support arms are configured to selectively move the brake member into and out of the housing.

Claims 10-20 (cancel without prejudice).

Claim 21 (new):

A miter saw comprising:

a base assembly defining a cutting zone;

a first linkage assembly pivotally coupled to the base assembly;

a second linkage assembly pivotally coupled to the base assembly;

a housing having at least a first region pivotally coupled to the first linkage assembly and at least a second region pivotally coupled to the second linkage assembly, where the first and second linkage assemblies couple the housing to the base so that the housing is moveable toward and away from the cutting zone;

a motor mounted on the housing;

a rotatable blade coupled to be driven by the motor to cut workpieces within the cutting zone when the housing is pivoted toward the cutting zone;

a detection system configured to detect one or more dangerous conditions between a person and the blade; and

a reaction system configured to take one or more predetermined actions in the event a dangerous condition is detected by the detection system, where the reaction system includes at least one brake member configured to engage and stop rotation of the blade in the event a dangerous condition is detected by the detection system;

where the brake member is configured to revolve about the blade as the housing is moved toward and away from the cutting zone.

Claim 22 (new):

The miter saw of claim 21, where the housing includes one or more arcuate channels, and where the reaction system includes one or more pins disposed to slide within the one or more arcuate channels, and where the brake member is coupled to the one or more pins.

Claim 23 (new):

A miter saw comprising:

a base assembly defining a cutting zone;

a housing coupled to the base assembly to move toward and away from the cutting zone;

a rotatable blade mounted at least partially within the housing and configured to cut workpieces within the cutting zone when the housing is moved toward the cutting zone;

a motor coupled to drive the blade; and

a safety system including at least one brake member configured to selectively engage and stop the rotation of the blade upon the occurrence of one or more predetermined events, where the brake member is coupled to move in an arcuate path that is generally concentric with the blade as the housing is moved toward and away from the cutting zone.

Claim 24 (new):

The miter saw of claim 23, where the housing includes one or more arcuate channels, and where the brake member is coupled to move along the one or more arcuate channels.

Claim 25 (new):

The miter saw of claim 24, where the safety system includes at least one pin disposed to slide within the one or more arcuate channels, and where the brake member is mounted on the pin.

Claim 26 (new):

The miter saw of claim 23, further comprising at least one linkage assembly to couple the brake member to the housing.

Claim 27 (new):

The miter saw of claim 26, where the linkage assembly is configured to move the brake member in a generally clockwise direction about the blade when the housing is moved in a generally counter-clockwise direction about the base assembly.

Claim 28 (new):

The miter saw of claim 23, where the brake member is coupled to maintain a substantially constant orientation relative to the blade as the brake member moves in the arcuate path.

Claim 29 (new):

A miter saw comprising:

a base assembly defining a cutting zone;

a pivot arm assembly pivotally coupled to the base assembly and pivotal toward and away from the cutting zone;

a circular blade supported by the pivot arm assembly and configured to cut workpieces within the cutting zone when the pivot arm assembly is pivoted toward the cutting zone;

a motor configured to rotate the blade; and

a safety system configured to stop the rotation of the blade upon the occurrence of one or more dangerous conditions between a person and the blade, where the safety system includes at least one brake member configured to brake the blade; and

where the safety system includes means for moving the brake member around the perimeter of the blade in the direction of the blade rotation when the pivot arm assembly is pivoted away from the cutting zone, and in the direction opposite the blade rotation when the pivot arm assembly is pivoted toward the cutting zone.